

## Connecting via Winsock to STN

Welcome to STN International! Enter x:x

LOGINID:ssspta1653hxp

PASSWORD:

TERMINAL (ENTER 1, 2, 3, OR ?):2

```
Welcome to STN International
                Web Page URLs for STN Seminar Schedule - N. America
NEWS
                 "Ask CAS" for self-help around the clock
NEWS
        Apr 08
                BEILSTEIN: Reload and Implementation of a New Subject Area
NEWS
        Apr 09
                ZDB will be removed from STN
NEWS
        Apr 09
                US Patent Applications available in IFICDB, IFIPAT, and IFIUDB
NEWS
        Apr 19
                Records from IP.com available in CAPLUS, HCAPLUS, and ZCAPLUS
NEWS
        Apr 22
                BIOSIS Gene Names now available in TOXCENTER
NEWS
        Apr 22
                Federal Research in Progress (FEDRIP) now available
NEWS
        Apr 22
                New e-mail delivery for search results now available
        Jun 03
NEWS
NEWS 10
        Jun 10
                MEDLINE Reload
                PCTFULL has been reloaded
        Jun 10
NEWS 11
                FOREGE no longer contains STANDARDS file segment
        Jul 02
NEWS 12
                USAN to be reloaded July 28, 2002;
NEWS 13
        Jul 22
                 saved answer sets no longer valid
                Enhanced polymer searching in REGISTRY
NEWS 14
        Jul 29
                NETFIRST to be removed from STN
NEWS 15
        Jul 30
                CANCERLIT reload
NEWS 16
        Aug 08
NEWS 17
        Aug 08
                PHARMAMarketLetter(PHARMAML) - new on STN
NEWS 18
                NTIS has been reloaded and enhanced
        Aug 08
                Aquatic Toxicity Information Retrieval (AQUIRE)
NEWS 19
        Aug 19
                 now available on STN
        Aug 19
                 IFIPAT, IFICDB, and IFIUDB have been reloaded
NEWS 20
                The MEDLINE file segment of TOXCENTER has been reloaded
NEWS 21
        Aug 19
NEWS 22
        Aug 26
                 Sequence searching in REGISTRY enhanced
                JAPIO has been reloaded and enhanced
NEWS 23
        Sep 03
        Sep 16 Experimental properties added to the REGISTRY file
NEWS 24
        Sep 16 CA Section Thesaurus available in CAPLUS and CA
NEWS 25
NEWS 26 Oct 01 CASREACT Enriched with Reactions from 1907 to 1985
NEWS 27 Oct 21 EVENTLINE has been reloaded
NEWS 28 Oct 24 BEILSTEIN adds new search fields
NEWS 29 Oct 24 Nutraceuticals International (NUTRACEUT) now available on STN
NEWS 30 Oct 25 MEDLINE SDI run of October 8, 2002
NEWS 31 Nov 18 DKILIT has been renamed APOLLIT
NEWS 32 Nov 25 More calculated properties added to REGISTRY
                TIBKAT will be removed from STN
NEWS 33 Dec 02
NEWS 34 Dec 04 CSA files on STN
                 PCTFULL now covers WP/PCT Applications from 1978 to date
NEWS 35 Dec 17
                TOXCENTER enhanced with additional content
NEWS 36 Dec 17
                 Adis Clinical Trials Insight now available on STN
NEWS 37 Dec 17
NEWS 38 Dec 30
                 ISMEC no longer available
                 Indexing added to some pre-1967 records in CA/CAPLUS
NEWS 39
        Jan 13
        Jan 21
                NUTRACEUT offering one free connect hour in February 2003
NEWS 40
                 PHARMAML offering one free connect hour in February 2003
NEWS 41
        Jan 21
                 Simultaneous left and right truncation added to COMPENDEX,
NEWS 42
        Jan 29
                 ENERGY, INSPEC
NEWS 43 Feb 13 CANCERLIT is no longer being updated
```

NEWS EXPRESS January 6 CURRENT WINDOWS VERSION IS V6.01a,

CURRENT MACINTOSH VERSION IS V6.0b(ENG) AND V6.0Jb(JP),

AND CURRENT DISCOVER FILE IS DATED 01 OCTOBER 2002

NEWS HOURS STN Operating Hours Plus Help Desk Availability

NEWS INTER General Internet Information NEWS LOGIN Welcome Banner and News Items

NEWS PHONE Direct Dial and Telecommunication Network Access to STN

NEWS WWW CAS World Wide Web Site (general information)

Enter NEWS followed by the item number or name to see news on that specific topic.

All use of STN is subject to the provisions of the STN Customer agreement. Please note that this agreement limits use to scientific research. Use for software development or design or implementation of commercial gateways or other similar uses is prohibited and may result in loss of user privileges and other penalties.

FILE 'HOME' ENTERED AT 15:02:40 ON 20 FEB 2003

=> file medline, uspatful, dgene, embase

COST IN U.S. DOLLARS

SINCE FILE TOTAL ENTRY SESSION 0.42 0.42

FULL ESTIMATED COST

FILE 'MEDLINE' ENTERED AT 15:03:35 ON 20 FEB 2003

FILE 'USPATFULL' ENTERED AT 15:03:35 ON 20 FEB 2003 CA INDEXING COPYRIGHT (C) 2003 AMERICAN CHEMICAL SOCIETY (ACS)

FILE 'DGENE' ENTERED AT 15:03:35 ON 20 FEB 2003 COPYRIGHT (C) 2003 THOMSON DERWENT

FILE 'EMBASE' ENTERED AT 15:03:35 ON 20 FEB 2003 COPYRIGHT (C) 2003 Elsevier Science B.V. All rights reserved.

=> s l1 and recombinant construct

L2 7 L1 AND RECOMBINANT CONSTRUCT

=> d 12 ti abs ibib tot

L2 ANSWER 1 OF 7 USPATFULL

TI High level of expression of ingap in bacterial and euraryotic cells

AB Removal of the nucleotide sequence encoding the signal peptide from the

INGAP coding sequence allows cultured cells to express substantial

INGAP coding sequence allows cultured cells to express substantial amounts of INGAP activity. Previous attempts have provided only low yields of INGAP, possibly because the signal sequence of INGAP is toxic to the cells.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 1998:108255 USPATFULL

TITLE: High level of expression of ingap in bacterial and

euraryotic cells

INVENTOR(S): Vinik, Aaron I., Norfolk, VA, United States

Pittenger, Gary L., Virginia Beach, VA, United States Rafaeloff-Phail, Ronit, Chesapeake, VA, United States

Barlow, Scott W., Norfolk, VA, United States

PATENT ASSIGNEE(S): Eastern Virginia Medical School of the Medical College

fo Hampton Roads, Norfolk, VA, United States (U.S.

corporation)

NUMBER KIND DATE

PATENT INFORMATION: US 5804421 19980908
APPLICATION INFO.: US 1997-909725 19970812 (8)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 1996-741096, filed

on 30 Oct 1996, now abandoned

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted

PRIMARY EXAMINER: Wax, Robert A.
ASSISTANT EXAMINER: Longton, Enrique D.
LEGAL REPRESENTATIVE: Banner & Witcoff, Ltd.

NUMBER OF CLAIMS: 18 EXEMPLARY CLAIM: 1

NUMBER OF DRAWINGS: 2 Drawing Figure(s); 2 Drawing Page(s)

LINE COUNT: 848

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L2 ANSWER 2 OF 7 DGENE (C) 2003 THOMSON DERWENT

TI Expression of islet neogenesis-associated protein - from recombinant construct lacking signal peptide, useful in the treatment of diabetes

AN AAW64790 Protein DGENE

AB This sequence represents INGAP, an islet neogenesisassociated protein. This sequence is used in the
construction of a recombinant construct having a
coding sequence lacking a signal sequence and which is operably linked to
transcription and translation initiation sites. This construct in a host
cell is useful for producing recombinant mature INGAP, which is useful in
the treatment of diabetes. High levels of INGAP expression can be
achieved in bacterial and eukaryotic cells by removing the signal peptide
as it is possibly toxic to cells.

ACCESSION NUMBER: AAW64790 Protein DGENE TITLE: Expression of islet neogenesis-

associated protein - from

recombinant construct lacking signal

peptide, useful in the treatment of diabetes

INVENTOR: Barlow S W; Pittenger G L; Rafaeloff-Phail R; Vinik A I

PATENT ASSIGNEE: (EVIR-N) EASTERN VIRGINIA MEDICAL SCHOOL.
PATENT INFO: US 5804421 A 19980908

APPLICATION INFO: US 1997-909725 19970812 PRIORITY INFO: US 1997-909725 19970812 US 1996-741096 19961030

DOCUMENT TYPE: Patent LANGUAGE: English

OTHER SOURCE: 1998-505656 [43]

L2 ANSWER 3 OF 7 DGENE (C) 2003 THOMSON DERWENT

TI Expression of islet neogenesis-associated protein - from recombinant construct lacking

signal peptide, useful in the treatment of diabetes

AN AAW64789 Protein DGENE

AB This cDNA sequence is the signal peptide of INGAP, an islet

neogenesis-associated protein. This sequence is removed during the construction of a recombinant construct which has a having a coding sequence lacking a signal sequence and which is operably linked to transcription and translation initiation sites. This construct in a host cell is useful for producing recombinant mature INGAP, which is useful in the treatment of diabetes. High levels of INGAP expression can be achieved in bacterial and eukaryotic cells by removing the signal peptide as it is possibly toxic to cells.

ACCESSION NUMBER: AAW64789 Protein DGENE TITLE: Expression of islet neogenesis-

associated protein - from

recombinant construct lacking signal

peptide, useful in the treatment of diabetes

INVENTOR: Barlow S W; Pittenger G L; Rafaeloff-Phail R; Vinik A I

PATENT ASSIGNEE: (EVIR-N) EASTERN VIRGINIA MEDICAL SCHOOL.

PATENT INFO: US 5804421 A 19980908

APPLICATION INFO: US 1997-909725 19970812 PRIORITY INFO: US 1997-909725 19970812 US 1996-741096 19961030

DOCUMENT TYPE: Patent

LANGUAGE: English

OTHER SOURCE: 1998-505656 [43]

L2 ANSWER 4 OF 7 DGENE (C) 2003 THOMSON DERWENT

TI Expression of islet neogenesis-associated protein - from recombinant construct lacking signal peptide, useful in the treatment of diabetes

AN AAV46422 CDNA DGENE

AB This cDNA sequence is an amplified PCR product of the islet

neogenesis-associated protein (INGAP) which

is used in the construction of a recombinant construct

having a coding sequence lacking a signal sequence and is operably linked to transcription and translation initiation sites. This construct in a host cell is useful for producing recombinant mature INGAP, which is useful in the treatment of diabetes. High levels of INGAP expression can be achieved in bacterial and eukaryotic cells by removing the signal peptide as it is possibly toxic to cells.

ACCESSION NUMBER: AAV46422 CDNA DGENE

TITLE: Expression of islet neogenesis-

associated protein - from

recombinant construct lacking signal

peptide, useful in the treatment of diabetes

INVENTOR: Barlow S W; Pittenger G L; Rafaeloff-Phail R; Vinik A I

PATENT ASSIGNEE: (EVIR-N) EASTERN VIRGINIA MEDICAL SCHOOL.

PATENT INFO: US 5804421 A 19980908 14p

APPLICATION INFO: US 1997-909725 19970812 PRIORITY INFO: US 1997-909725 19970812 US 1996-741096 19961030

DOCUMENT TYPE: Patent LANGUAGE: English

OTHER SOURCE: 1998-505656 [43]

L2 ANSWER 5 OF 7 DGENE (C) 2003 THOMSON DERWENT

TI Expression of islet neogenesis-associated protein - from recombinant construct lacking signal peptide, useful in the treatment of diabetes

AN AAV46420 DNA DGENE

AB AAV46420 and AAV46421 are PCR primers used in the construction of a

recombinant islet neogenesis-associated

protein (INGAP) which has a coding sequence lacking a signal sequence and which is operably linked to transcription and translation initiation sites. This construct in a host cell is useful for producing recombinant mature INGAP, which is useful in the treatment of diabetes. High levels of INGAP expression can be achieved in bacterial and

eukaryotic cells by removing the signal peptide as it is possibly toxic

to cells.

ACCESSION NUMBER: AAV46420 DNA DGENE
TITLE: Expression of islet neogenesis-

associated protein - from

recombinant construct lacking signal

peptide, useful in the treatment of diabetes

14p

INVENTOR: Barlow S W; Pittenger G L; Rafaeloff-Phail R; Vinik A I

PATENT ASSIGNEE: (EVIR-N) EASTERN VIRGINIA MEDICAL SCHOOL.

PATENT INFO: US 5804421 A 19980908

APPLICATION INFO: US 1997-909725 19970812 PRIORITY INFO: US 1997-909725 19970812

US 1996-741096 19961030

DOCUMENT TYPE: Patent LANGUAGE: English

OTHER SOURCE: 1998-505656 [43]

L2 ANSWER 6 OF 7 DGENE (C) 2003 THOMSON DERWENT Expression of islet neogenesis-associated

Expression of islet neogenesis-associated protein - from recombinant construct lacking

signal peptide, useful in the treatment of diabetes

AN AAV46419 cDNA DGENE

AB This cDNA sequence is the 5'-end of the islet neogenesis-associated protein (INGAP). This

sequence is used in the construction of a recombinant

construct having a coding sequence lacking a signal sequence and which is operably linked to transcription and translation initiation sites. This construct in a host cell is useful for producing recombinant mature INGAP, which is useful in the treatment of diabetes. High levels of INGAP expression can be achieved in bacterial and eukaryotic cells by removing the signal peptide as it is possibly toxic to cells.

ACCESSION NUMBER: AAV46419 cDNA DGENE

TITLE: Expression of islet neogenesis-

associated protein - from

recombinant construct lacking signal

peptide, useful in the treatment of diabetes

INVENTOR: Barlow S W; Pittenger G L; Rafaeloff-Phail R; Vinik A I

PATENT ASSIGNEE: (EVIR-N) EASTERN VIRGINIA MEDICAL SCHOOL.

PATENT INFO: US 5804421 A 19980908 14p

APPLICATION INFO: US 1997-909725 19970812 PRIORITY INFO: US 1997-909725 19970812 US 1996-741096 19961030

DOCUMENT TYPE: Patent LANGUAGE: English

OTHER SOURCE: 1998-505656 [43]

L2 ANSWER 7 OF 7 DGENE (C) 2003 THOMSON DERWENT

TI Expression of islet neogenesis-associated

protein - from recombinant construct lacking
signal peptide, useful in the treatment of diabetes

AN AAV46421 DNA DGENE

AB AAV46420 and AAV46421 are PCR primers used in the construction of a recombinant islet neogenesis-associated

protein (INGAP) which has a coding sequence lacking a signal sequence and which is operably linked to transcription and translation initiation sites. This construct in a host cell is useful for producing recombinant mature INGAP, which is useful in the treatment of diabetes. High levels of INGAP expression can be achieved in bacterial and eukaryotic cells by removing the signal peptide as it is possibly toxic

eukaryotic cells by removing the signal peptide as it is possibly toxic to cells.

ACCESSION NUMBER: AAV46421 DNA DGENE
TITLE: Expression of islet neogenesis-

associated protein - from

recombinant construct lacking signal

peptide, useful in the treatment of diabetes

INVENTOR: Barlow S W; Pittenger G L; Rafaeloff-Phail R; Vinik A I

PATENT ASSIGNEE: (EVIR-N) EASTERN VIRGINIA MEDICAL SCHOOL.

PATENT INFO: US 5804421 A 19980908 1

APPLICATION INFO: US 1997-909725 19970812 PRIORITY INFO: US 1997-909725 19970812 US 1996-741096 19961030

DOCUMENT TYPE: Patent LANGUAGE: English

OTHER SOURCE: 1998-505656 [43]

```
b345;s pn=us 5804421;t1/39/1
       20feb03 10:39:59 User259289 Session D494.1
                    0.079 DialUnits File415
           Estimated cost File415
     $0.46 TELNET
     $0.46 Estimated cost this search
     $0.46 Estimated total session cost 0.079 DialUnits
File 345:Inpadoc/Fam.& Legal Stat 1968-2003/UD=200306
     (c) 2003 EPO
     Set Items Description
                 ______
              1 PN=US 5804421
 1/39/1
DIALOG(R) File 345: Inpadoc/Fam. & Legal Stat
(c) 2003 EPO. All rts. reserv.
14326486
Basic Patent (No, Kind, Date): WO 9818913 A1 19980507
                                                     <No. of Patents: 007>
Patent Family:
   Patent No
                Kind Date
                                Applic No
                                            Kind Date
                 A1 19980522
   AU 9750007
                                   AU 9750007
                                                       19971030
                                                   Α
   AU 727237
                   B2 20001207
                                   AU 9750007
                                                   Α
                                                       19971030
   EP 1007647
                   A1 20000614
                                   EP 97912942
                                                   A 19971030
   EP 1007647
                   A4
                       20010926
                                   EP 97912942
                                                   A 19971030
   JP 2001502916
                   T2 20010306
                                   JP 98520665
                                                   A 19971030
   US 5804421
                   Α
                       19980908
                                   US 909725
                                                   A
                                                       19970812
   WO 9818913
                   A1 19980507
                                   WO 97US19415
                                                 Α
                                                       19971030 (BASIC)
Priority Data (No, Kind, Date):
   US 741096 A 19961030
   WO 97US19415 W 19971030
   US 909725 A 19970812
   US 741096 B2 19961030
PATENT FAMILY:
AUSTRALIA (AU)
 Patent (No, Kind, Date): AU 9750007 Al 19980522
   HIGH LEVEL OF EXPRESSION OF INGAP (English)
   Patent Assignee: EASTERN VIRGINIA MEDICAL SCHOO
   Author (Inventor): VINIK AARON I; PITTENGER GARY I; RAFAELOFF RONIT;
     BARLOW SCOTT W
   Priority (No, Kind, Date): US 741096 A 19961030; WO 97US19415 W
     19971030
   Applic (No, Kind, Date): AU 9750007 A
                                         19971030
   IPC: * C12N-015/00; C07H-021/04; C07K-001/22
   CA Abstract No: * 128(26)318010E
   Derwent WPI Acc No: * C 98-272209
Language of Document: English
 Patent (No, Kind, Date): AU 727237 B2 20001207
   HIGH LEVEL OF EXPRESSION OF INGAP (English)
   Patent Assignee: EASTERN VIRGINIA MEDICAL SCHOO
          (Inventor): VINIK AARON I; PITTENGER GARY I; RAFAELOFF RONIT;
     BARLOW SCOTT W
   Priority (No, Kind, Date): US 741096 A 19961030; WO 97US19415 W
     19971030
   Applic (No, Kind, Date): AU 9750007 A
                                           19971030
   IPC: * C12N-015/00; C07H-021/04; C07K-001/22
   CA Abstract No: * 128(26)318010E; 129(17)212539Q
   Derwent WPI Acc No: * C 98-272209; C 98-505656
```



```
Language of Document: English
CANADA (CA)
 Legal Status (No, Type, Date, Code, Text):
    CA
         2270412
                      Р
                            19990429
                                     CA REFW
                             APPLICATION (ENTSPRICHT PCT ANMELDUNG)
                             WO 9818913 P
EUROPEAN PATENT OFFICE (EP)
 Patent (No, Kind, Date): EP 1007647 A1 20000614
   HIGH LEVEL OF EXPRESSION OF INGAP (English; French; German)
    Patent Assignee: EASTERN VIRGINIA MEDICAL SCHOO (US)
   Author (Inventor): VINIK AARON I (US); PITTENGER GARY I (US);
     RAFAELOFF RONIT (US); BARLOW SCOTT W (US)
    Priority (No, Kind, Date): WO 97US19415 W
     19961030
    Applic (No, Kind, Date): EP 97912942 A 19971030
    Designated States: (National) AT; BE; CH; DE; DK; ES; FI; FR; GB; GR;
     IE; IT; LI; LU; MC; NL; PT; SE
    IPC: * C12N-015/00; C07H-021/04; C07K-001/22
   CA Abstract No: * 128(26)318010E; 129(17)212539Q
   Derwent WPI Acc No: * C 98-272209; C 98-505656
   Language of Document: English
     RAFAELOFF RONIT (US); BARLOW SCOTT W (US)
```

Patent (No, Kind, Date): EP 1007647 A4 20010926 HIGH LEVEL OF EXPRESSION OF INGAP (English; French; German) Patent Assignee: EASTERN VIRGINIA MEDICAL SCHOO (US)

Author (Inventor): VINIK AARON I (US); PITTENGER GARY I (US);

Priority (No, Kind, Date): WO 97US19415 W 19971030; US 741096 A 19961030

Applic (No, Kind, Date): EP 97912942 A 19971030

Designated States: (National) AT; BE; CH; DE; DK; ES; FI; FR; GB; GR; IE; IT; LI; LU; MC; NL; PT; SE

IPC: \* C12N-015/00; C07H-021/04; C07K-001/22; C07K-014/47

CA Abstract No: \* 128(26)318010E; 129(17)212539Q Derwent WPI Acc No: \* C 98-272209; C 98-505656

Language of Document: English

## EUROPEAN PATENT OFFICE (EP)

Legal Status (No, Type, Date, Code, Text): EP 1007647 P 19961030 EP AA

> APPLICATION) (PRIORITAET (PATENTANMELDUNG))

PRIORITY (PATENT

CORRESPONDS TO PCT

19971030; US 741096 A

US 741096 A 19961030

EP 1007647 Ρ 19971030 EP AA PCT-APPLICATION (PCT-ANMELDUNG)

WO 97US19415 W

19971030 EP 1007647 Ρ 19971030 EP AE EP-APPLICATION

(EUROPAEISCHE ANMELDUNG)

EP 97912942 A 19971030

EP 1007647 Ρ 20000614 EP AK DESIGNATED CONTRACTING STATES IN AN APPLICATION WITH SEARCH REPORT: (IN EINER ANMELDUNG BENANNTE VERTRAGSSTAATEN)

> AT BE CH DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

EP 1007647 Ρ 20000614 ERSTRECKUNG DES EP AX

EUROPAEISCHEN PATENTS AUF (ZAHLUNG VON

BENENNUNGSGEBUEHREN)

AL PAYMENT 19990519; LT PAYMENT 19990519; LV PAYMENT 19990519; RO PAYMENT 19990519; SI

PAYMENT 19990519

```
20000614 EP A1
    EP 1007647
                   Ρ
                                              PUBLICATION OF APPLICATION
                             WITH SEARCH REPORT (VEROEFFENTLICHUNG DER
                             ANMELDUNG MIT RECHERCHENBERICHT)
    EP 1007647
                        20000614 EP 17P
                                              REQUEST FOR EXAMINATION
                             FILED (PRUEFUNGSANTRAG GESTELLT)
                             19990519
    EP 1007647
                        20010919 EP RIC1
                                              CLASSIFICATION (CORRECTION)
                              (KLASSIFIKATION (KORR.))
                              7C 12N 15/00 A, 7C 07H 21/04 B, 7C 07K 1/22
                             B, 7C 07K 14/47 B
    EP 1007647
                   Ρ
                        20010926 EP AK
                                              DESIGNATED CONTRACTING
                             STATES MENTIONED IN A SUPPLEMENTARY SEARCH
                             REPORT: (IN EINEM ERGAENZENDEN
                             RECHERCHENBERICHT BENANNTE VERTRAGSSTAATEN)
                             AT BE CH DE DK ES FI FR GB GR IE IT LI LU MC
                             NL PT SE
   EP 1007647
                   Ρ
                       20010926 EP A4
                                              SUPPLEMENTARY SEARCH REPORT
                              (ERGAENZENDER RECHERCHENBERICHT)
   EP 1007647
                   Ρ
                       20021009 EP 170
                                              FIRST EXAMINATION REPORT
                              (ERSTER PRUEFUNGSBESCHEID)
                              20020822
JAPAN (JP)
 Patent (No, Kind, Date): JP 2001502916 T2 20010306
    Priority (No, Kind, Date): WO 97US19415 W 19971030; US 741096 A
     19961030
   Applic (No, Kind, Date): JP 98520665 A 19971030
           C12N-015/09; C07K-001/22; C12N-001/15; C12N-001/19; C12N-001/21
      ; C12N-005/10; C12P-021/02
    CA Abstract No: * 128(26)318010E; 129(17)212539Q
    Derwent WPI Acc No: * C 98-272209; C 98-505656
   Language of Document: Japanese
UNITED STATES OF AMERICA (US)
 Patent (No, Kind, Date): US 5804421 A 19980908
   HIGH LEVEL OF EXPRESSION OF INGAP IN BACTERIAL AND EURARYOTIC CELLS
      (English)
   Patent Assignee: EASTERN VIRGINIA MEDICAL SCHOO (US)
   Author (Inventor): VINIK AARON I (US); PITTENGER GARY L (US);
     RAFAELOFF-PHAIL RONIT (US); BARLOW SCOTT W (US)
    Priority (No, Kind, Date): US 909725 A
                                           19970812; US 741096 B2
     19961030
   Applic (No, Kind, Date): US 909725 A 19970812
   National Class: * 435069100; 435252300; 435320100; 536023100;
     536023500; 536024100; 530350000
   IPC: * C12N-015/00
   CA Abstract No: ; 129(17)212539Q
   Derwent WPI Acc No: ; C 98-505656
   Language of Document: English
UNITED STATES OF AMERICA (US)
 Legal Status (No, Type, Date, Code, Text):
                       19961030 US AA
   US 5804421
                   Ρ
                                              PRIORITY
                             US 741096 B2 19961030
   US 5804421
                       19970812 US AE
                                              APPLICATION DATA (PATENT)
                             (APPL. DATA (PATENT))
                             US 909725 A 19970812
   US 5804421
                       19971202 US AS02
                                              ASSIGNMENT OF ASSIGNOR'S
                   Р
                             INTEREST
                             EASTERN VIRGINIA MEDICAL SCHOOL OF THE
```

```
MEDICAL COLLEGE OF HAMPTON ROADS NORFOLK, ;
                              VINIK, AARON I.: 19971021; PITTENGER, GARY
                             L. : 19971021; RAFAELOFF-PHAIL, RONIT :
                              19971021; BARLOW, SCOTT W. : 19971021
    US 5804421
                   Ρ
                        19980908 US A
                                              PATENT
    US 5804421
                   Ρ
                        20001121 US RF
                                              REISSUE APPLICATION FILED
                              (REISSUE APPL. FILED)
                              20000908
WORLD INTELLECTUAL PROPERTY ORGANIZATION, PCT (WO)
  Patent (No, Kind, Date): WO 9818913 A1 19980507
    HIGH LEVEL OF EXPRESSION OF INGAP (English)
    Patent Assignee: EASTERN VIRGINIA MEDICAL SCHOO (US)
           (Inventor): VINIK AARON I; PITTENGER GARY I; RAFAELOFF RONIT;
      BARLOW SCOTT W
    Priority (No, Kind, Date): US 741096 A
                                             19961030
    Applic (No, Kind, Date): WO 97US19415 A 19971030
    Designated States: (National) AL; AM; AT; AU; AZ; BA; BB; BG; BR; BY;
       CA; CH; CN; CU; CZ; DE; DK; EE; ES; FI; GB; GE; GH; HU; ID; IL; IS;
          KE; KG; KP; KR; KZ; LC; LK; LR; LS; LT; LU; LV; MD; MG; MK; MN;
      MW; MX; NO; NZ; PL; PT; RO; RU; SD; SE; SG; SI; SK; SL; TJ; TM; TR;
           UA; UG; UZ; VN; YU; ZW; AM; AZ; BY; KG; KZ; MD; RU; TJ; TM
      (Regional) GH; KE; LS; MW; SD; SZ; UG; ZW; AT; BE; CH; DE; DK; ES; FI
      ; FR; GB; GR; IE; IT; LU; MC; NL
    Filing Details: WO 100000 With international search report
    IPC: * C12N-015/00; C07H-021/04; C07K-001/22
    CA Abstract No: ; 128(26)318010E
    Derwent WPI Acc No: ; C 98-272209
    Language of Document: English
WORLD INTELLECTUAL PROPERTY ORGANIZATION, PCT (WO)
  Legal Status (No, Type, Date, Code, Text):
                   Ρ
                       19961030 WO AA
                                              PRIORITY (PATENT)
   WO 9818913
                             US 741096 A
                                            19961030
   WO 9818913
                   Ρ
                        19971030 WO AE
                                              APPLICATION DATA (APPL.
                             DATA)
                             WO 97US19415 A
                                              19971030
   WO 9818913
                   Ρ
                       19980507 WO AK
                                              DESIGNATED STATES CITED IN A
                             PUBLISHED APPLICATION WITH SEARCH REPORT
                              (DESIGNATED STATES CITED IN A PUBLISHED APPL.
                             WITH SEARCH REPORT)
                             AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ
                             DE DK EE ES FI GB GE GH HU ID IL IS JP KE KG
                             KP KR KZ LC LK LR LS LT LU LV MD MG MK MN MW
                             MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM
                             TR TT UA UG UZ VN YU ZW AM AZ BY KG KZ MD RU
                             TJ TM
   WO 9818913 P
                       19980507 WO AL
                                              DESIGNATED COUNTRIES FOR
                             REGIONAL PATENTS CITED IN A PUBLISHED
                             APPLICATION WITH SEARCH REPORT (DESIGNATED
                             COUNTRIES FOR REGIONAL PATENTS CITED IN A
                             PUBLISHED APPL. WITH SEARCH REPORT)
                             GH KE LS MW SD SZ UG ZW AT BE CH DE DK ES FI
                             FR GB GR IE IT LU MC NL
   WO 9818913
                   ₽
                       19980507 WO A1
                                              PUBLICATION OF THE
                             INTERNATIONAL APPLICATION WITH THE
                             INTERNATIONAL SEARCH REPORT (PUB. OF THE
                             INTERNATIONAL APPL. WITH THE INTERNATIONAL
                             SEARCH REPORT)
   WO 9818913
                   Ρ
                       19980730 WO DFPE
                                              REQUEST FOR PRELIMINARY ...
                             EXAMINATION FILED PRIOR TO EXPIRATION OF 19TH
                             MONTH FROM PRIORITY DATE
```

EP: PCT APP. ART. 158 (1)

19980916 WO 121

Р

WO 9818913

## Roman Pat. No. 5,804,421

		(EP: PCT ANM. ART. 158 (1))
WO 9818913	P	19990429 WO ENP ENTRY INTO THE NATIONAL
		PHASE IN:
		CA 2270412 AA
WO 9818913	P	19990430 WO ENP ENTRY INTO THE NATIONAL
		PHASE IN:
		JP 98520665 A
WO 9818913	P	19990902 DE 8642/REG IMPACT ABOLISHED FOR DE
		(WIRKUNG WEGGEFALLEN FUER DE)